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09/944,923	08/31/2001	Roy Chrisop	SLA 1050	2251

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EXAMINER

LAM, ANDREW H

ART UNIT PAPER NUMBER

2624

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/944,923

Applicant(s)

CHRISOP ET AL.

Examiner

Andrew H. Lam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/31/2001; 9/3/01
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8, 9, 12-21, 24 and 25 are rejected under U.S.C. 102

(b) as being anticipated by AuClair (U.S. 5659670).

Regarding claim 1, AuClair discloses an electrophotographic printing machine that is capable of copying and printing (figs. 1-5) comprising:

(1) a user interface (UI) 14 which may be a touch screen (inherently touch screen allows the user to response to interface prompts), or any other suitable control panel, providing an operator interface with the system (col.3, lines 37-39).

(2) an image processing station (IPS) 12 which may include the processor(s) and controller(s) (col.4, line 2) for use in accordance with the printer memory allocation system of the present invention (col.3 lines 66-67). Further, as stated in (col. 8, lines 41-45) a user may determine whether to program the printer to automatically change memory allocations, or to display the various printer usages printer determinations and memory allocation recommendations for discrete user selection and implementation.

Regarding claim 2, AuClair discloses that UI 14 enables an operator to control and monitor various operator adjustable functions and maintenance activities (col. 3, lines 34-35). AuClair further states that UI 14 may display electronics document on a

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display screen, as well as carry out the network user and printer memory utilization analysis, recommend changes regarding or automatically reconfigure printer cache and /or memory allocation to so as optimize a particular set of utilization parameters (col. 3, lines 41-45).

Regarding claim 3, AuClair discloses that a user may allocate random access memory for the printer or let the system automatically change memory allocations (col.8, lines 41-45).

Regarding claim 4, AuClair discloses in fig.1 system 100, block 122 shows the determination of the number of reused fonts in the font cache associated with the printer. Typically, in PostScript and/or PCL emulation language printers, fonts are communicated to the printer according to the outlined, definitions of those fonts (col. 7, lines 34-39). AuClair further states that the amount of memory allocated to the font cash can therefore have an important effect on the overall efficiency of the printer. As such, the font cache management enabled by the system 100 of the present invention can have an important effect on the efficiency of the printer (col.7 lines 48-58).

Regarding claim 5, AuClair discloses that a UI 14 to be a touch screen (inherently touch screen allows the user to response to interface prompts and that it is a GUI). See column 3, lines 39-45, where memory allocation is allocated based on UI interface where memory is allocated for MFP functions.

Regarding claim 6, AuClair discloses that the UI 14 may be any suitable control panel, providing an operator interface with the system (col. 3 lines 38-39).

Regarding claim 8, AuClair discloses that implementation of system 100 may base historical memory/printer usage data on a sample of the most recent 100 uses of the system, other sample size or selection parameters may be used as desired (col.6, lines 39-42).

Regarding claim 9, AuClair discloses in fig.3 a sample display of the configuration table cross-referencing memory allocation for the present invention functions.

Regarding claim 12, AuClair discloses with continued reference to fig.3, a user may upload diskette 330 into a drive 340 included with or connected to IPS 12. Processor 345 of IPS 12 may then download to or upload for a printer usage determinations and buffer size, duplicate buffer and recovered memory reassignment change parameter profiles and/or implementation schemes (col. 9, lines 44-51).

Regarding claim 13, AuClair discloses a display list data storage location having a predetermined size (col.10, line 30-31).

Regarding claim 14, AuClair discloses a system, an electrophotographic printing machine (figs. 1-5) comprising:

(1) a user interface (UI) 14 which may be a touch screen (inherently touch screen allows the user to response to interface prompts), or any other suitable control panel, providing an operator interface with the system (col.3, lines 37-39).

(2) an image processing station (IPS) 12 which may include the processor(s) and controller(s) (col.4, line 2) for use in accordance with the printer memory allocation system of the present invention (col.3 lines 66-67). Further, as stated in (col. 8, lines 41-

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45) a user may determine whether to program the printer to automatically change memory allocations, or to display the various printer usages printer determinations and memory allocation recommendations for discrete user selection and implementation.

Regarding claim 15, AuClair discloses a system having an image processing station (IPS) 12 which may include the processor(s) and controller(s) (col.4, line 2) for use in accordance with the printer memory allocation system of the present invention (col.3 lines 66-67). A UI 14 enables an operator to control and monitor various operator adjustable functions and maintenance activities (col. 3, lines 34-35). AuClair further states that UI 14 may display electronics document on a display screen, as well as carry out the network user and printer memory utilization analysis, recommend changes regarding or automatically reconfigure printer cache and /or memory allocation to optimize a particular set of utilization parameters (col. 3, lines 41-45).

Regarding claim 16, AuClair discloses a system that a user may allocate random access memory for the printer or let the system automatically change memory allocations (col.8, lines 41-45).

Regarding claim 17, AuClair discloses a system in fig.1 system 100, block 122 shows the determination of the number of reused fonts in the font cash associated with the printer. Typically, in PostScript and/or PCL emulation language printers, fonts are communicated to the printer according to the outlined, definitions of those fonts (col. 7, lines 34-39). AuClar further states that the amount of memory allocated to the font cash can therefore have an important effect on the overall efficiency of the printer. As such,

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the font cache management enabled by the system 100 of the present invention can have an important effect on the efficiency of the printer (col.7 lines 48-58).

Regarding claim 18, AuClair discloses a system of claim 15 wherein a UI 14 to be a touch screen (inherently touch screen allows the user to response to interface prompts and that it is a GUI): See column 3, lines 39-45, where memory allocation is allocated based on UI interface where memory is allocated for MFP functions.

Regarding claim 20, AuClair disclose a system in fig. 5 that implementation of system 100 may base historical memory/printer usage data o a sample of the most recent 100 uses o f the system, other sample size or selection parameters may be used as desired (col.6, lines 39-42).

Regarding claim 21, AuClair discloses a system in fig.3 a sample display of the configuration table cross-referencing memory allocation for the present invention functions.

Regarding claim 24, AuClair discloses a system referring to fig.3, a user may upload diskette 330 into a drive 340 included with or connected to IPS 12. Processor 345 of IPS 12 may then download to or upload for a printer usage determinations and buffer size, duplicate buffer and recovered memory reassignment change parameter profiles and/or implementation schemes (col. 9, lines 44-51).

Regarding claim 25, AuClair discloses a system supply a display list data storage location having a predetermined size (col.10, line 30-31).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7, rejected under 35 U.S.C. 103(a) as being unpatentable over AuClair in view of Venkatraman et al (U.S. 5956487).

AuClair disclose that a network of one or more personal computers (PC) is shown interfacing/in communication with IPS (col.3, lines 29-30).

AuClair does not disclose expressly an embedded web server in the electrophotographic printing machine.

Venkatraman discloses that when Web access functionality is embedded in a device it provides and enables low cost widely accessible and enhanced user interface functions for the device (col. 2, lines 13-19).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify AuClair as per teaching of Venkatrama because of the following reason: it is low cost, and would enhance user interface functions and device (col. 2, line 14) management which is a stated objective of AuClair (Col. 2, lines 33-41).

Claim 10, rejected under 35 U.S.C. 103(a) as being unpatentable over AuClair in view of Mahmound et al (U.S. 6785746).

AuClair discloses that a user can allocate (fig.4 controller) memory for the electrophotographic printing machine.

AuClair does not disclose expressly that a user must reboot the system in order for memory to assign to the proper components.

Mahmound discloses that the computer reboots because without rebooting, the system is not able to utilize the new information inputted into the EEPROM memory (col.9, lines 20-24).

At the time of the invention, it would have been obvious to one of ordinary skill in to modify AuClair as per teaching of Mahmound because of the following reason: by rebooting the MFP device of AuClair the new distribution of the RAM allocation which is inputted by the operator is the new information inputted into the RAM memory would take place, thus causing the system configuration demanded by AuClair.

Claim 11, rejected under 35 U.S.C. 103(a) as being unpatentable over AuClair in view of Bitar et al (U.S. 6353844).

AuClair discloses a system may base historical memory/printer usage data on a sample of the most recent uses of the system.

AuClair does not disclose expressly that a user can prioritize the MFP function in event of memory contention.

Bitar discloses that resources such as CPUs and memory can be allocated for each batch jobs (col. 11, line 32), wherein batch jobs within the critical batch job class are assigned higher priority than batch jobs within the non-critical batch job class (col. 13, lines 10-24). Critical job can borrow resources when needed to complete the job on time. In this way a system that employ this method can improves the response time

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and can complete the job faster, because of the more efficient use to the resources (col. 11, lines 45-48).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify AuClair as per teaching of Bitar because by allocating additional resources such as CPUs and memory to higher priority function would improve response time of the printer. Thus, achieving the objective of AuClair, which is to optimize printing efficiency.

Claim 19, rejected under 35 U.S.C. 103(a) as being unpatentable over AuClair in view of Venkatraman et al (U.S. 5956487).

AuClair disclose that a network of one or more personal computers (PC) is shown interfacing/in communication with IPS (col.3, lines 29-30).

AuClair does not disclose expressly an embedded web server in the electrophotographic printing machine.

Venkatraman discloses that when Web access functionality is embedded in a device it provides and enables low cost widely accessible and enhanced user interface functions for the device (col. 2, lines 13-19).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify AuClair as per teaching of Venkatrama because of the following reason: it is low cost, and would enhance user interface functions and device (col. 2, line 14) management which is a stated objective of AuClair (col. 2, lines 33-41).

Claim 22, rejected under 35 U.S.C. 103(a) as being unpatentable over AuClair in view of Mahmound et al (U.S. 6785746).

AuClair discloses that a user can allocate (fig.4 controller) memory for the electrophotographic printing machine.

AuClair does not disclose expressly that a user must reboot the system in order for memory to assign to the proper components.

Mahmoud discloses that the computer reboots because without rebooting, the system is not able to utilize the new information inputted into the EEPROM memory (col.9, lines 20-24).

At the time of the invention, it would have been obvious to one of ordinary skill in to modify AuClair as per teaching of Mahmoud to reboot the MFP device so that the distribution of the RAM allocation is implemented as per the information inputted into the RAM memory by the user.

Claim 23, rejected under 35 U.S.C. 103(a) as being unpatentable over AuClair in view of Bitar et al (U.S. 6353844).

AuClair discloses a system may base historical memory/printer usage data on a sample of the most recent uses of the system.

AuClair does not disclose expressly that a user can prioritize the MFP function in event of memory contention.

Bitar discloses that resources such as CPUs and memory can be allocated for each batch jobs (col. 11, line 32), wherein batch jobs within the critical batch job class are assigned higher priority than batch jobs within the non-critical batch job class (col. 13, lines 10-24). Critical job can borrow resources when needed to complete the job on time. In this way a system that employ this method can improves the response time

and can complete the job faster, because of the more efficient use to the resources (col. 11, lines 45-48).


At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify AuClair as per teaching of Bitar because by allocating additional resources such as CPUs and memory to higher priority function would improve response time of the printer. Thus, achieving the objective of AuClair, which is to optimize printing efficiency.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew H. Lam whose telephone number is (571) 272-8569. The examiner can normally be reached on M-F (9:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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